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(54) EXHAUST PARTICULATE PURIFYING DEVICE**(57) Abstract:**

PURPOSE: To prevent crack and melting damage of a filter caused by excessive raising of a regenerating temperature by arranging a means for detecting the particulate collecting amount of the filter, and inhibiting regeneration of the filter by a regenerating means when a detected particulate collecting amount becomes a over collecting condition value or more.

CONSTITUTION: In an ECU 13 during engine operation, front pressure P1 and rear pressure P2 which are detected by pressure sensors 9, 10 are subtracted, and the pressure difference ΔP in a filter 7 is found out. A intake air mass flow rate G detected by a hot wire type flow rate sensor 3 is found out, and the volume flow rate V of fluid which passes through the filter 7 is found out from the front pressure P1 and the average temperature Tex of an input gas temperature and a discharge gas temperature which are detected by temperature sensors 11, 12. The collecting amount PMq of exhaust particulate is found out from the pressure difference ΔP and the volume flow amount V. In the case where the collecting amount PMq is in a regeneration judging range value, it is transferred to regeneration control, collecting particulate is burnt by heating of an electric heater 8. In the case where a condition in

which regeneration is not enabled is continued for a long time, excessive collection is judged, and regenerating treatment is inhibited.

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